

REMARKS/ARGUMENTS

This application has been carefully considered in light of the non-final office action mailed October 31, 2008. A one month extension of time is submitted herewith.

Claim 6 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In this respect, the claim has been amended to overcome this grounds for rejection and, therefore, reconsideration and withdrawal of this rejection is respectfully requested.

Claim 2 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. In this respect, the claim has been canceled and the elements thereof added to claim 24 which is thus amended as suggested by the Examiner to overcome this grounds for rejection.

Claims 1, 7, 9, 12, 18 & 24 have been rejected under 35 U.S.C. 103(a) as being obvious over US Patent 4,973,219 to Brickner et al. Claim 2 has been rejected as being obvious over a combination of the teachings of Bricker et al and US Patent 4,043,285 to Nordstrom. Claims 3-6, 9-11, 13 and 22 have been rejected under 35 U.S.C. 103(a) as being obvious over Brickner et

al when further considered in view of the teachings US Patent 3,252,603 to Davis. Claim 8 has been rejected over Brickner et al when considered in view of the teachings of US Patent 6,161,887 to Shiota.

Claims 19 and 23 have been rejected for obviousness over a combination of the teachings of Brickner et al and the additional structure disclosed in US Patent 5,915,906 to Lucking.

The Examiner has also withdrawn the indicated allowability of the subject matter of claims 5, 6, 8, 10, 11, 13 and 20 based upon the second consideration of the teachings of Brickner et al.

The reference to Brickner et al has been considered and claims 1 and 24 have been further amended to more clearly distinguish over the reference. In Brickner et al, a shuttle is provided that is not designed to permit X-Y motion in a plane and the track system does not appear to have first and second tracks that transversely intersect with one another. Rather, the track system is formed of loops with switching mechanisms provided between the loops as described at column 7 beginning at line 38 of the reference. Further, as set forth at column 9, beginning at line 39 of Brickner, the shuttles are moved along monorails using four sets of wheels. Because the rail or track system of

Brickner is a monorail system, the shuttles are not supported by spaced pairs of parallel first and second tracks as claimed in claims 1 and 24 and the shuttles can not move in an X-Y plane as is possible with the transfer units of the present invention. Such X-Y movement is important to allow shuttle or transfer units to move efficiently above any of the cells with the ability to move about other units within the track system quickly, see paragraphs 0040, 0044 and 0061 of the current application. In Brickner et al, if one shuttle approaches another along one of the monorails, the shuttles must either follow one another or move in reverse directions and there is no provision for lateral movement without moving in complete loops which results in wasted time and increased wear and tear on the system components and the shuttle.

In view of the foregoing, it is respectfully submitted that claims 1, 7, 9, 12, 18 and 24 as well as new claim 25 are distinguishable over Brickner et al and should therefore be in condition for formal allowance.

The combination rejection of one of the claims over Brickner et al and Nordstrom has also been considered, however, even if one were to combine the elements of cell structure shown in Nordstrom with Brickner et al, the grid system would not permit

the movement of transfer units that is possible and claimed with respect to the present invention. Further, the entire grid system of Bricker et al is based upon movement of shuttle along rails that transition in direction through switches provided at the ends of longitudinal runs of the rails. It is not believed such a system would be compatible within a hull of a ship or the like. The system of Nordstrom includes on board traveling bridge cranes 82 that are movable along tracks 80 that only extend longitudinally of a ship. There is no X-Y grid rail system on the ship that permits a transfer unit to selectively move in a X-Y plane over a plurality of tiered storage cells as is taught by the present invention and as claimed in claim 1. In view of the foregoing, reconsideration of the rejection of claim 24, amended to include the structure of claim 2, is requested.

The combination of Brickner et al and Davis has also been considered but again, such a combination, even if appropriate, which applicants do not agree, would not result in a handling system having the advantages discussed above concerning the present invention and Brickner et al. Further, claim 3 recites first and second means for selectively engaging and disengaging the at least one first and second drive gears with the rack members and such feature is not taught in Davis. Claims 10 and 11 of the present application recite pairs of drive gears and

guide means positioned between the pairs of gears, which structure is also not suggested by the combination. Claim 13 is directed to specific carriage assemblies for use in supporting the transfer units from the grid track system and no such carriages assemblies are suggested in the combination of Brickner et al and Davis. In addition, claim 22 recites first and second drive motors which is also not disclosed in Davis. In view of the foregoing, reconsideration of the rejection of claims 3-6, 9-11, 13 and 22 over the combination suggested is respectfully requested.

The combination of Brickner et al and the reference to Shiota et al has been considered however, even if one combines the teachings of Shiota with Brickner et al, the resulting structure would not allow the differences in operating principles as set forth above that are believed to clearly distinguish the present invention from Brickner et al alone. Therefore, reconsideration of the combination rejection of claim 8 is respectfully requested.

The combination rejection of Brickner et al and Lucking has also been considered, however, Lucking does not teach any of the differences between the present invention and Brickner et al as discussed above and thus the combination does not anticipate the

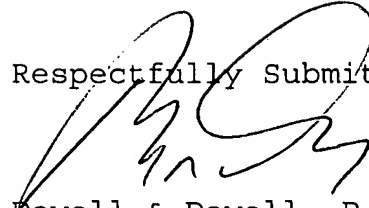
invention defined by claims 19 and 23.

Thus, the cited art does not teach or disclose the structure and operable characteristics of the present invention nor provide for the operable and structural advantages as discussed in the present application. The present invention provides an overhead system that provides for maximum use of overhead space and movement of transfer units relative to cells in which containers may be stacked. Further, one or more transfer vehicles may operate at the same time using the system of the present invention and can operate above any of the storage tiers defined by the cells of the present invention while moving in X-Y planes. Additionally the present invention also provides guidance features for controlling the movement of the spreader beams and any containers carried thereby whenever the containers are elevated relative to the storage cells.

Therefore, favorable consideration and allowance of the amended claims is respectfully solicited. Should the Examiner have any questions regarding this matter or the allowability of the application, it would be appreciated if the Examiner would contact the undersigned attorney-of-record for purposes of scheduling a personal interview prior to entering any final action in order to expedite the further prosecution of this

application.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'R. Dowell', is written over the typed name.

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